

Rail Improvement Program Receives \$10 Million Funding Boost



The NCDOT Rail Division has awarded an additional \$10 million for the Freight Rail and Rail Crossing Safety Improvement program for fiscal year 2017. State officials accelerated the project selection process because several of the ranked projects involve railroads damaged by flooding from Hurricane Matthew.



Aberdeen and Rockfish rail line west of CSX crossing near Fayetteville

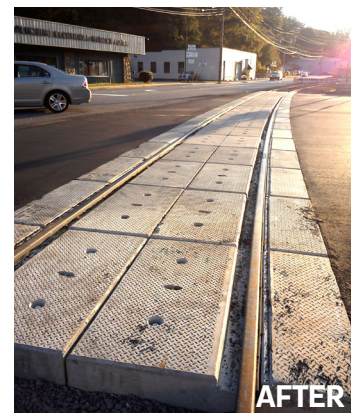
"These investments will enhance safety and improve rail infrastructure connections to economic development opportunities," Rail Director Paul Worley said. The newly-approved funding brings the total program amount to \$13.75 million for the year.

Four shortline improvement projects were selected for funding, with half of the cost coming from state funds and the other half from private investment:

- \$1.7 million to upgrade bridges in Wake, Nash, Wilson and Beaufort counties and to replace more than 10,000 crossties over 31 miles of track in Wake, Johnston, Nash and Wilson counties. Other elements of this project include rail roadbed and crosstie replacement to accommodate heavier railcars in key areas;
- \$7.3 million to return a section of railroad to service in Columbus County between Chadbourn and Whiteville, as well as other track upgrades from Chadbourn to Tabor City and into South Carolina to connect the line to the national rail system;
- \$725,000 to replace five culverts and harden the railroad over 29 miles in Currituck, Camden and Pasquotank counties; and
- \$393,594 to build a new truck/train transload facility in Hoke County, and to replace crossties and harden the railroad for eight miles in Cumberland and Hoke counties.

Officials also approved \$500,000 for a safety improvement project in Salisbury. The project will accelerate the elimination of a highway/rail at-grade crossing at Henderson Grove Church Road by developing the right-of-way plans for a more efficient access roadway to Julian Road.

Crossing Improvements Made in Sylva



Chipper Curve Road

The NCDOT Rail and Highway Divisions recently partnered with the Blue Ridge Southern Railroad (BLU) to improve two at-grade railroad crossings on BLU's tracks in Sylva. The two crossings, Chipper Curve Road and Grindstaff Cove Road, had been deteriorating over the years and were in great need of repair due to the high volume of traffic traveling across the crossings and the number of complaints received by the NCDOT and the Railroad.

The project replaced the existing surfaces with a modular concrete "tub" crossing. This particular type of crossing is a precast, reinforced concrete surface that eliminates the need for ballast, ties and railroad fasteners, therefore reducing future maintenance costs for the Railroad and creating a smoother ride for the traveling public.

BLU was responsible for the actual installations while NCDOT Division provided asphalt for the approaches and traffic control

while the crossing was closed for installation. Rail Division FRRCSI funding provided \$118,000 for the crossing materials.

Grindstaff Cove Road





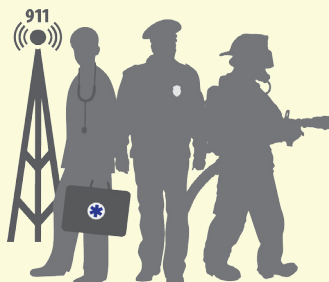
BeRailSafe Staff promotes Rail Safety Training Opportunities at NC League of Municipalities Annual CityVision Conference

On October 23rd and 24th, BeRailSafe attended the North Carolina League of Municipalities Annual CityVision Conference in Raleigh, North Carolina. Each year, the CityVision Conference allows for representatives from municipalities across North Carolina to interact with vendors and organizations who offer a service or product that can help create a better community. BeRailSafe attended the conference to help urge municipalities to assess their rail risk, and hopefully mitigate it by signing up to have their 911 operators, firefighters, police personnel, and EMS trained to deal with a rail emergency.

In order to provide a personalized interaction with the attending representatives, BeRailSafe created a unique "Rail Safety Report" for each municipality in North Carolina. The Report highlighted key statistics, such as the miles of track within a municipality, or the number of at-grade crossings. The personalized touch was well received by all municipal representatives.

BeRailSafe made valuable connections and started important conversations with many individuals from across North Carolina, interacting with well over 100 different municipal representatives. BeRailSafe looks to engage these representatives after the conference to set up classes and training for their public officials to help mitigate their rail risk, as well as create and grow a culture of rail safety.

Are You Rail Ready?



If EMS, 911, firefighters and police do not receive the proper training to handle rail-related emergencies, how will this affect your town?



Out and About with BeRailSafe, Operation Lifesaver and NC BY TRAIN

Promoting Rail Safety and NC BY TRAIN passenger train service in Safety City at the North Carolina State Fair.



Chief Deputy Secretary Walt Gray welcomes fair goers to NCDOT's Safety City as Rail Director Paul Worley looks on.



NCSU's Mr. and Mrs. Wolf pledge to BeRailSafe.



Operation Lifesaver's Margaret Cannell staffing the booth.



Mr. Moon-Asheville Tourists



BeRailSafe's Roger Smock and the Duke Blue Devil



Go. Reconnect.

TransLoc®
Connecting public transit options
to complete your train trip.

NC By Train Launches Transit App Pilot Program

The Rail Division is pleased to announce the launch of a three-month pilot program that offers commuters an additional option to help get them home from the train station without using their car.

In partnership with TransLoc, a North Carolina-based transportation technology company that helps riders plan trips and tracks buses in real time, commuters will now be able to use the TransLoc application on their smart phones to plan their trip from home to the NC By Train station. Users can provide their location and find nearby transit stations, including rail, or even book an Uber ride within the app to get to their next stop.

"NCDOT is committed to finding additional ways of making riders aware of available transit options," said Paul Worley, Rail Division Director. "The launch of this pilot program is part of our commitment to finding additional, quality ways of bridging the gap of 'the last mile' between the train station and your destination."

Currently, the tool is available in the Raleigh, Cary, Durham, Burlington, Greensboro, High Point, Salisbury, Kannapolis, and Charlotte areas. Users can download the TransLoc Rider app in Apple iTunes or the Google Play store for Android users.

Two NC Stations in Amtrak's Top Ten in the Country for Customer Satisfaction

Once again, North Carolina made a strong showing in Customer Satisfaction Ratings for FFY 16. The Durham Station was ranked fourth nationally, scoring a 95% customer satisfaction rating. The High Point Depot ranked tenth nationally, scoring 94%.

The station in Durham is staffed by Amtrak Agents. The High Point Depot is staffed by NCDOT contract employees. Congratulations to the employees at both stations for this recognition. Your hard work and dedication is appreciated by NCDOT and Amtrak management as well as the thousands of passengers that you serve.




Durham Amtrak Station



High Point Depot

Ridership & Revenue on NC's Amtrak Service – *Sept. 2016 vs. 2015

	RIDERSHIP			REVENUE		
	2016	2015	% +/-	2016	2015	% +/-
<i>Piedmont</i>	12,873	12,297	5%	\$277,919	\$259,146	7%
<i>Carolinian</i>	19,992	21,707	-8%	\$1,230,867	\$1,320,684	-7%

753



Hours Volunteered by N.C. Train Hosts in September, supporting NC BY TRAIN onboard and at events.

September 2016 service modifications and annulments impacted four *Piedmont* trains and six *Carolinian* trains. On September 19th, all *Piedmont* trains were annulled and *Carolinian* trains operated between New York and Raleigh only to accommodate PIP project work. On September 26th - 28th, *Carolinian* trains operated between Raleigh and Charlotte only to accommodate CSX track work. Additional disruptions for PIP project work will continue to occur as necessary through completion of the program. Average gasoline prices were approximately equal in September 2016 and September 2015 (EIA Weekly Retail Gasoline for Lower Atlantic region).

The Rail Division Receives EPA Southeast Diesel Collaborative (SEDC) 2016 Community Leadership Award for its efforts in locomotive emissions reduction



The Rail Division was honored to receive the EPA Southeast Diesel Collaborative (SEDC) 2016 Community Leadership Award for its efforts in locomotive emissions reduction, and intends to remain an industry leader for emissions reduction efforts. The conference was held September 28th and 29th in Savannah, GA.

The NCDOT Rail Division recognizes the need for positive stewardship to the citizens of North Carolina by minimizing air pollution caused by its passenger locomotives. The Rail Division contracts Amtrak to operate the *Piedmont* passenger rail service, which provides twice-daily round trip service between Raleigh and Charlotte. A third round trip is scheduled to begin in January 2018, which will lead to increased air pollution along the *Piedmont* corridor unless proactive measures are taken.

Furthermore all counties along the *Piedmont* corridor between Raleigh and Charlotte are identified as EPA non-attainment in one or more areas, meaning that one or more types of air pollution levels are above desired limits. Reduction of locomotive emissions is a positive step toward overall air pollution improvement.

The NCDOT Rail Division has accomplished groundbreaking efforts in locomotive emissions reduction by becoming the first rail agency in the country to implement a retrofit Tier 4 / Tier 3+ air pollution reduction system onto an in-service passenger locomotive. NCDOT recently partnered with Rail Propulsion Systems (RPS) of Fullerton, CA to design, test, and install a specialized selective catalytic reduction system, known as a blended aftertreatment system (BATS), onto NCDOT Locomotive 1859. The BATS is designed to chemically mitigate locomotive emissions prior to release into the environment.

The Rail Division's future plans include the implementation of several additional BATS subsystems that will further lower pollution to federally required levels. Additionally, the Rail Division has previously performed tests with biodiesel fuel in its locomotives and demonstrated up to 60% reduction of pollutants vs. standard locomotive ULSD fuel with no loss of fuel economy or engine performance. The Rail Division believes that a combination of the BATS plus biodiesel fuel will further reduce emissions and possibly achieve emissions levels cleaner than EPA Tier 4 for all pollutants. NCDOT and RPS are currently working to get the BATS certified with the EPA and hope to equip all F59PH locomotives in the *Piedmont* passenger service with a second generation of this BATS technology.



Curtis McDowell and Lynn Harris of McDowell Engineers & Associates stand on the BATS-equipped Locomotive 1859.

Piedmont Improvement Program Milestones

Five major projects were placed in service the last week of October. Ribbon cutting ceremonies were held to mark the official opening of the projects:

- McLeansville Road Grade Separation
- Haw River Passing Siding Project
- Klumac Road Grade Separation
- Kimball Road Grade Separation
- Bowers to Lake Double Track Project



McLeansville Road Grade Separation Ribbon Cutting



Haw River Passing Siding Ribbon Cutting



Klumac Road Grade Separation Ribbon Cutting



Kimball Road Grade Separation Ribbon Cutting



Bowers to Lake Double Track Ribbon Cutting



The Piedmont changing tracks at CP Lake near Thomasville



Spent to Date of \$520M (eff. 10/31/2016)

Component	Expenditure
PD&A/ROW	\$53,423,342
Equipment Procurement & Rebuild	\$31,124,315
Stations & Facilities	\$46,393,893
Track & Structures	\$302,564,443
CRISP	\$2,180,376
Program Totals	\$435,686,369

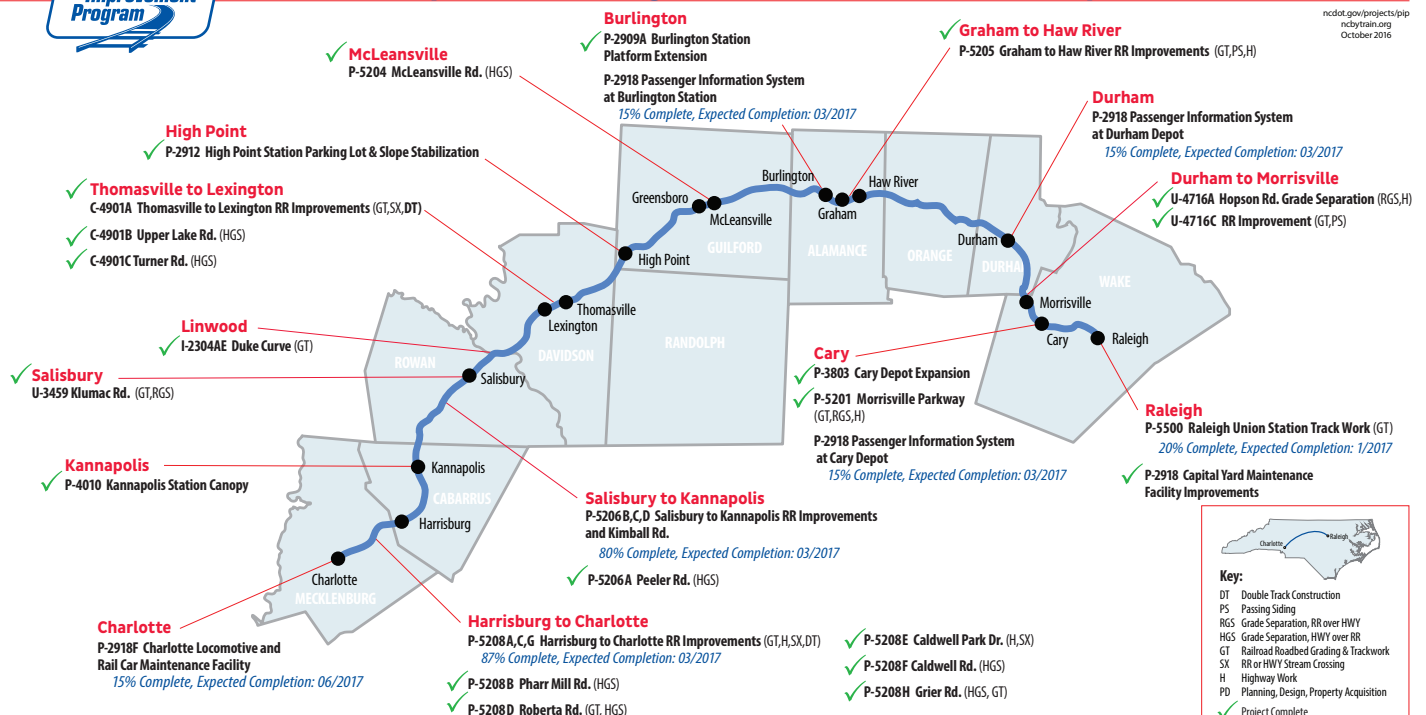
Nine new contracts totaling \$16,284,588 were awarded in October.

Piedmont Improvement Program

Piedmont Improvement Program – October 2016 Status Report



ncdot.gov/projects/ncbytrain.org
October 2016



Note: % is NCDOT Contract Completion percentage

2 Locomotives

60% Complete

Expected Completion Date: 12/2016 & 1/2017



NC By Train – Piedmont Equipment ✓ 5 Locomotives ✓ 12 Railcars

2 Cab Control Units

70% Complete

Expected Completion Date: 12/2016 & 1/2017

2 Additional Cab Control Units from non-ARRA funding*

Piedmont Improvement Program – Project Photos – October 2016



P-5500 Raleigh Union Station, roadbed and station construction



P-5500 Raleigh Union Station, station construction



P-5205 Graham to Haw River passing siding completed



P-5205 Graham to Haw River passing siding completed



C-4901 Bowers to Lake double track completed



C-4901 Bowers to Lake double track completed

Piedmont Improvement Program – Project Photos – October 2016



U-3459 Klumac Road, roadway paving



P-5206 Reid to North Kannapolis, track construction



P-5206 Reid to North Kannapolis, Kimball Road grade separation



P-5208 Haydock to Junker, McClean Road crossing



P-5208 Haydock to Junker, double track at Grier Road Bridge



P-5208 Haydock to Junker, double track, Harrisburg